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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/806,180	06/05/2001	Stephen William Colley	KPT 1090	5384
321	7590	11/02/2007	EXAMINER	
SENNIGER POWERS ONE METROPOLITAN SQUARE 16TH FLOOR ST LOUIS, MO 63102			MANOHARAN, VIRGINIA	
			ART UNIT	PAPER NUMBER
			1797	
			NOTIFICATION DATE	DELIVERY MODE
			11/02/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspatents@senniger.com

Office Action Summary

Application No.

09/806,180

Applicant(s)

COLLEY ET AL.

Examiner

Virginia Manoharan

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a). The phrase "relatively dry" in claim 14 is indefinite as it could also mean as --relatively wet--.
- b). The claimed "the removal of water therefrom" in claim 14, lacks proper antecedent basis for support in the claims.

Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention. Evidence that claims 1-14 fail to correspond in scope with that which applicants regard as the invention can be found in the reply filed August 27, 2007. In that paper, applicants have stated that "the pressure swing process can surprisingly be manipulated to enable purification of ethyl acetate from a feedstock comprising ethyl acetate, ethanol and water" and this statement indicates that the invention is different from what is defined in the claims because the surprising **manipulated steps** are not positively recited in the claims, steps different from that described in the prior art.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0151886 with or without Japan 5186392.

The above references are applied for the same combined reasons as set forth at page 2 of the previous Office Action.

Applicants' arguments filed have been fully considered but they are not persuasive.

Applicants' argument that there is no evidence that "a skilled artisan recognizes that variation of the water content in the first distillate recovered from the first distillation zone is a result-effective variable, much less that the art recognizes that by maintaining the water content of the first distillate below a certain maximum, the pressure swing system may advantageously be practiced in a manner that provides for recovery of purified ethyl acetate from a feedstock comprising ethyl acetate, ethanol and water" is not considered well-taken. Contrary to applicants' assertion, EP '886 suggests, page 14, lines 17-18 and 25, the presence of "water of known composition" thereby suggesting that water is present in known composition in the separation of ethyl acetate from a mixture containing the same by a distillative process; and further suggesting that an optimum amount exists. Finding this amount is of the essence within the purview of an artisan, resulting from an experimentation of an obvious nature. Those skilled in the art will appreciate that the mol % may vary with requirements and the design parameters of the system. Applicants recognized this. In fact, applicants admit in the **REMARKS**, dated August 27, 2007, that "As would be understood by one of ordinary skill in the art,

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there are a myriad of possible process factors and conditions that impact the recovery of a first distillate containing no more than about 10 mol% water from the first distillation zone. Nevertheless, design and operation of a pressure swing distillation system capable of **recovering a first distillate containing no more than about 10 mol% water from the first distillation zone is fully within the skill of those skilled in the art** upon reading applicants' disclosure depending on a variety of system factors and conditions including, for example, the composition of the feedstock, the design of the distillation column or columns forming the respective distillation zone in particular, upon the number of theoretical stages in the column), upon the heat supplied for reboiling purposes, and upon the operating pressures". The specification did not mention the criticality of the argued mol %. No commercial success is claimed, nor is any other factor indicating nonobviousness shown to exist.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Virginia Manoharan whose telephone number is 571-272-1450.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola, can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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VIRGINIA MANCHARAN
PRIMARY EXAMINER
ART UNIT 1331797